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09/690,872	10/17/2000	Lily Barkovic Mummert	YOR920000462-US1	2932

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EXAMINER

VO, LILIAN

ART UNIT	PAPER NUMBER
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2127

DATE MAILED: 02/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/690,872

Applicant(s)

MUMMERT ET AL.

Examiner

Lilian Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 - 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1 – 15 are pending.

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1- 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. **Claims 1, 11, 13 and 15** recite the limitations "the capacity" and "the capacities" in page 21, lines 4 and 6, page 23, lines 5 and 8, and page 24, lines 2, lines 6 and 8, respectively. There is insufficient antecedent basis for these limitations in the claims.

5. **Claim 2** recites the limitations "the capacity", "the life expectancy" and "the system", in page 21, lines 1, 2, 4 and 7 - 8. There is insufficient antecedent basis for these limitations in the claim.

6. **Claims 3 and 4** recite the limitation "the workload", in pages 21 and 22, lines 1 - 2. There is insufficient antecedent basis for this limitation in the claims.

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7. **Claim 6** recites the limitation "the life expectance", in page 22, line 2. There is insufficient antecedent basis for this limitation in the claim.

8. **Claim 12** recites the limitations "the shortest life expectancy" and "the life expectancy", in page 23, lines 3 and 6 - 8. There is insufficient antecedent basis for these limitations in the claim.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

10. Claims 1 – 15 are rejected under 35 U.S.C. 102(a) as being anticipated by Proceedings of the Computer Measurement Group ("The Use of Life Expectancy to Manage Notes Domino E-Mail Storage", hereinafter CMG).

11. Regarding **claim 1**, CMG teaches a method for projecting usage of computer resources for a plurality of processing systems in a processing environment (abstract) comprising the step of:

representing the capacity of each of said plurality of processing systems in units of time (page 2, col. 2, 5<sup>th</sup> paragraph and figs 1 and 2); and

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sorting the capacities of the plurality of processing systems from shortest to longest time (page 3, col. 2, 4<sup>th</sup> paragraph, page 4, col. 2, 3<sup>rd</sup> paragraph, page 6, col. 1, paragraphs 1 – 2).

12. Regarding **claim 2**, CMG teaches the method of claim 1, wherein said representing of the capacity of each of said plurality of processing systems comprises:

calculating the life expectancy of each of said resources (page 3, col. 1, paragraphs 2 – 5, col. 2, paragraphs 1 – 2);

identifying at least one critical resource having the shortest life expectancy (page 3, col. 2, paragraphs 3 – 4, page 6, col. 1, paragraphs 1 – 2); and

defining the life expectancy of the system as the life expectancy of the at least one critical resource (page 3, col. 2, paragraphs 3 – 4, page 4, col. 1, 1<sup>st</sup> paragraph, col. 2, paragraphs 2 – 3, page 6, col. 1, paragraphs 1 – 2).

13. Regarding **claim 3**, CMG teaches the method of claim 1, further comprising altering the workload on at least two of said plurality of processing systems to improve resource utilization (page 4, col. 1, paragraph 7 - col. 2, paragraph 5).

14. Regarding **claim 5**, CMG teaches the method of claim 3, further comprising reevaluating the usage of computer resources for the at least two of said plurality of processing systems (page 3, col. 2, 2<sup>nd</sup> paragraph, page 6, col. 1, paragraphs 1 – 2, and figs. 2 and 6).

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15. Regarding **claim 6**, CMG teaches the method of claim 1, wherein said representing comprises plotting the life expectancy for each of N resources of processing system in an N dimensional capacity space (page 3, figs. 1 – 2).

16. Regarding **claim 7**, CMG teaches the method of claim 6, further comprising identifying at least one critical resource for each processing system based on its location within the N dimensional capacity space (page 3, col. 2, 4<sup>th</sup> paragraph, page 6, col. 1, paragraphs 1 – 2, col. 2, 3<sup>rd</sup> paragraph).

17. Regarding **claim 8**, CMG teaches the method of claim 6, further comprising identifying at least one available resource in said plurality of processing systems based on its location within the N dimensional capacity space (page 4, col. 1, paragraph 7 – col. 2 paragraph 5).

18. **Claims 4, 9 – 15** are rejected on the same ground as stated above.

### ***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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20. Claims 1 – 5 and 11 – 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartsell et al. (US Pat. Application Publication US 2003/0236745 A1, hereinafter Hartsell) in view of Chafe (US Pat. Application Publication US 2001/0054097 A1).

21. Regarding **claim 1**, Hartsell teaches a method for projecting usage of computer resources for a plurality of processing systems in a processing environment (page 1, paragraph 0009) comprising the step of:

representing the capacity of each of said plurality of processing systems in units of time (page 13, paragraph 0104, page 20, paragraph 0166, and pages 37 – 38, paragraph 0288).

Hartsell however did not teach the step of sorting the capacities of the plurality of processing systems. Chafe teaches a system that has a capability to provide graphical representations of estimated resource utilization calculations to have multiple views of the system data with sorted by capacity (abstract, page 2, paragraph 0038, and page 3, paragraph 0061).

It would have been obvious for one of an ordinary skill in the art to recognize the sorting feature of Chafe's system could sort the data by either ascending or descending order, in this case from shortest to longest time. It would also have been obvious for one of an ordinary skill in the art, at the time the invention was made, to combine the teachings of Hartsell and Chafe to have the capability to have multiple views of the data

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with the sorting feature to suit the needs of different types of users (Chafe: page 2, paragraph 0038).

22. Regarding **claim 2**, Hartsell teaches the method of claim 1, wherein said representing of the capacity of each of said plurality of processing systems comprises:

calculating the life expectancy of each of said resources (page 21, paragraph 0180, fig. 5, 135);

identifying at least one critical resource having the shortest life expectancy (pages 21 - 22, paragraphs 0180 – 0181, fig. 5, 150); and

defining the life expectancy of the system as the life expectancy of the at least one critical resource (pages 21 - 22, paragraphs 0180 – 0188, fig. 5, 150, 155).

23. Regarding **claim 3**, Hartsell teaches the method of claim 1, further comprising altering the workload on at least two of said plurality of processing systems to improve resource utilization (page 22, paragraphs 0184 – 0188, fig. 5, 150, 155).

24. Regarding **claim 5**, Hartsell teaches the method of claim 3, further comprising reevaluating the usage of computer resources for the at least two of said plurality of processing systems (page 20, paragraphs 0170, 0172, page 22, paragraphs 0184 – 0188, fig. 5).

25. **Claims 11 – 15** are rejected on the same ground as stated above.



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26. Claim 6 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartsell et al. (US Pat. Application Publication US 2003/0236745 A1, hereinafter Hartsell) in view of Chafe (US Pat. Application Publication US 2001/0054097 A1) and further in view of MacForlane et al (US 6,516,348 B1, hereinafter MacForlane).

27. Regarding **claim 6**, Hartsell and Chafe combined did not teach the additional limitation as claimed. Nevertheless, MacForlane teaches the step of calculating and predicting capacity limits of system resources in graphical presentation (col. 9, lines 14 – 34, col. 12, lines 6 – 15, 51 – col. 13, lines 4).

It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to incorporate MacForlane's teaching to the combined teachings of Hartsell and Chafe to obtain from the graphical presentation the possible constraints on resources usage.

28. Regarding **claim 7**, Hartsell and Chafe combined did not teach the additional limitation as claimed. Nevertheless, MacForlane teaches the step of identifying at least one critical resource for each processing system based on its location within the N dimensional capacity space (col. 12, lines 51 – col. 13, lines 4).

It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to incorporate MacForlane's teaching to the combined teachings of

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Hartsell and Chafe to obtain from the graphical presentation the possible constraints on resources usage.

29. Regarding **claim 8**, Hartsell and Chafe combined did not teach the additional limitation as claimed. Nevertheless, MacForlane teaches the step of identifying at least one available resource in said plurality of processing systems based on its location within the N dimensional capacity space (col. 6, lines 11 – 33, and 53 - 65).

It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to incorporate MacForlane's teaching to the combined teachings of Hartsell and Chafe to obtain from the graphical presentation the possible constraints on resources usage.

30. **Claims 9 – 10** are rejected on the same ground as stated above.

### ***Conclusion***

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Srinivasan, US 5,548,506 disclosed of reallocation critical resource.

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 703-305-7864. The examiner can normally be reached on Monday - Thursday, 7:30am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lilian Vo  
Examiner  
Art Unit 2127

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February 19, 2004



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